

COMBINED DECLARATION AND POWER OF ATTORNEY

As below named inventor, I hereby declare that

This declaration is of the following type:

- ☒ original ☐ design ☐ supplemental  
☐ national stage of PCT  
☐ divisional ☐ continuation ☐ continuation-in-part

My residence, post office address, and citizenship are as stated below next to my name. I believe I am the original, first, and sole inventor (*if only one name is listed below*) or an original, first, and joint inventor (*if plural names are listed below*) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

WATER-SOLUBLE LUMINESCENT QUANTUM DOTS AND  
BIOMOLECULAR CONJUGATES THEREOF AND RELATED  
COMPOSITIONS AND METHODS OF USE

the specification of which:

- ☒ is attached hereto.  
☐ was filed on \_\_\_\_\_ as Serial No. \_\_\_\_\_ and was amended on \_\_\_\_\_ (*if applicable*).  
☐ was filed by Express Mail No. \_\_\_\_\_ as Serial No. not known yet, and was amended on \_\_\_\_\_ (*if applicable*).  
☐ was described and claimed in PCT International Application No. \_\_\_\_\_ filed on \_\_\_\_\_ and as amended under PCT Article 19 on \_\_\_\_\_ (*if any*).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

COUNTRY	APPLICATION	DATE OF FILING (day,month,year)	PRIORITY CLAIMED UNDER 35 USC 119			
				YES		NO
				YES		NO
				YES		NO

I hereby claim the benefit pursuant to Title 35, United States Code, § 119(e) of the following United States provisional application(s):

PRIOR U.S. PROVISIONAL APPLICATIONS CLAIMING THE BENEFIT UNDER 35 USC 119(e)	
APPLICATION NO.	DATE OF FILING
60/101,748	September 24, 1998
60/131,987	April 30, 1999

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT UNDER 35 USC 120					
U.S. APPLICATIONS			Status (check one)		
U.S. APPLICATIONS	U.S. FILING DATE		PATENTED	PENDING	ABANDONED
1. 0 /					
2. 0 /					
3. 0 /					
PCT APPLICATIONS DESIGNATING THE U.S.			Status (check one)		
PCT APPLICATION No.	PCT FILING DATE	U.S. SERIAL NOS. ASSIGNED (if any)	PATENTED	PENDING	ABANDONED
4.					
5.					
6.					

DETAILS OF FOREIGN APPLICATIONS FROM WHICH PRIORITY CLAIMED UNDER 35 USC 119 FOR ABOVE LISTED U.S./PCT APPLICATIONS				
ABOVE APPLN. NO.	COUNTRY	APPLICATION NO.	DATE OF FILING (day,month,yr)	DATE OF ISSUE (day,month,yr)
1.				
2.				
3.				
4.				
5.				
6.				

As a named inventor, I hereby appoint the following attorneys to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Berton Scott Sheppard, Reg. 20922  
 James B. Muskal, Reg. 22797  
 Dennis R. Schlemmer, Reg. 24703  
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 David J. Schodin, Reg. 41294  
 Paul L. Ahern, Reg. 17020  
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 Noel I. Smith, Reg. 18698

I further direct that correspondence concerning this application be directed to LEYDIG, VOIT & MAYER, LTD., Two Prudential Plaza, Suite 4900, 180 North Stetson, Chicago, Illinois 60601-6780, Telephone (312) 616-5600.

I hereby declare that all statements made herein of my own knowledge are true, that all statements made on information and belief are believed to be true, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor: Shuming Nie

Inventor's signature \_\_\_\_\_

Date \_\_\_\_\_

Country of Citizenship: China

Residence: Bloomington, IN

Post Office Address: 612 Nightridge Rd., Apt. 24, Bloomington, Indiana 47401

Full name of second joint inventor, if any: Warren C.W. Chan

Inventor's signature \_\_\_\_\_

Date \_\_\_\_\_

Country of Citizenship: US

Residence: Bloomington, IN

Post Office Address: 1411 W. Allen St., Bloomington, Indiana 47403

Full name of third joint inventor, if any: Steven R. Emory

Inventor's signature \_\_\_\_\_

Date \_\_\_\_\_

Country of Citizenship: US

Residence: Los Alamos, NM

Post Office Address: 274 Garver Lane, Los Alamos, New Mexico 87544

Applicant or Patentee: Nie et al.  
Serial or Patent No. Not yet assigned  
Filed or Issued: Herewith  
For: WATER-SOLUBLE LUMINESCENT QUANTUM DOTS AND BIOMOLECULAR  
CONJUGATES THEREOF AND RELATED COMPOSITIONS AND METHODS  
OF USE

VERIFIED STATEMENT (DECLARATION)  
CLAIMING SMALL ENTITY STATUS  
37 C.F.R. §§ 1.9(f) & 1.27(d) - NONPROFIT ORGANIZATION

I hereby declare that I am an official empowered to act on behalf of the nonprofit organization identified below:

Name of Organization: Advanced Research and Technology Institute, Inc.  
Address of Organization: 1100 Waterway Boulevard, Suite 100  
Indianapolis, Indiana 46202-2156

Type of Nonprofit Organization:

- ☐ University or other institution of higher education.  
☒ Tax exempt under Internal Revenue Service Code (26 U.S.C. §§ 501(a) and 501(c)(3)).  
☐ Nonprofit scientific or educational organization under statute of state of the United States of America:  
Name of State: \_\_\_\_\_  
Citation of Statute: \_\_\_\_\_  
☐ Would qualify as tax exempt under Internal Revenue Service Code (26 U.S.C. §§ 501(a) and 501(c)(3)) if located in the United States of America.  
☐ Would qualify as nonprofit scientific or educational organization under statute of state of the United States of America if located in the United States of America.  
Name of State: \_\_\_\_\_  
Citation of Statute: \_\_\_\_\_

I hereby declare that the nonprofit organization identified above qualifies as a nonprofit organization as defined in 37 C.F.R. § 1.9(e) for purposes of paying reduced fees under Sections 41(a) and (b) of Title 35, United States Code, with regard to the invention entitled WATER-SOLUBLE LUMINESCENT QUANTUM DOTS AND BIOMOLECULAR CONJUGATES THEREOF AND RELATED COMPOSITIONS AND METHODS OF USE, by the inventors Shuming Nie, Warren C.W. Chen, and Steven R. Emory-, described in:

- ☒ The specification filed herewith.  
☐ Application Serial No. \_\_\_\_\_, filed  
☐ Patent No. \_\_\_\_\_, issued

I hereby declare that rights under contract or law have been conveyed to and remain with the nonprofit organization with regard to the above-identified invention.

### Others Having Rights In The Invention

If the rights held by the nonprofit organization are not exclusive, each individual, concern or organization having rights to the invention is listed below, and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 C.F.R. § 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 C.F.R. § 1.9(d), or a nonprofit organization under 37 C.F.R. § 1.9(e). (NOTE: Separate verified statements are required from each named person, concern, or organization having rights to the invention averring to his/her/its status as a small entity.)

Name:

Address:

☐ Individual

☐ Small Business Concern

☐ Nonprofit Organization

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 C.F.R. § 1.28(b)).

I hereby declare that all statements made herein of my own knowledge are true, that all statements made on information and belief are believed to be true, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Name of Person Signing:

Ronald D. Henriksen

Title in Organization:

President

Address of Person Signing:

1100 Waterway Boulevard, Suite 100  
Indianapolis, Indiana 46202-2156

Ronald D. Henriksen  
Signature

September 23, 1999  
Date